

## CLAIMS

We claim:

1. A method of making a weak acid cation exchange resin comprising:  
converting a swollen form weak acid cation exchange resin to a  
converted, unswollen form weak acid cation exchange resin, and steam  
cleaning the converted, unswollen form weak acid cation ion exchange  
resin to obtain a cleaned weak acid cation exchange resin in an  
unswollen form.
2. The method of claim 1 in which the unswollen weak acid cation  
exchange resin is selected from one or more copolymers of crosslinked  
poly(acrylic acid), crosslinked poly(methacrylic acid), hydrolyzed  
crosslinked poly((C<sub>1</sub>-C<sub>4</sub>)alkyl acrylate) and hydrolyzed crosslinked  
poly(acrylonitrile).
3. The method of claim 1 in which the converted, unswollen, weak acid  
cation exchange resin is contacted with 2 to 5 kilograms of steam per  
kilogram of hydrogen-form weak acid cation exchange resin.
4. The method of claim 1 in which the converted, unswollen, weak acid  
cation exchange resin is contacted with steam for 2 to 4 hours.
5. The method of claim 1 in which the converted, unswollen weak acid  
cation exchange resin is contacted with a peroxide.
6. A resin made by the method of claim 1.
7. A system or product comprising the resin of claim 1.
8. The system or product of claim 7 in which said system is selected  
from the group consisting of a pharmaceutical purification system, an  
industrial water treatment system, a consumer water treatment

system, and a catalytic system, and in which said product is selected from the group consisting of a water purification jug, a water purification cartridge, and combined cartridge and jug.

- 5           9.     A downstream product made using the resin of claim 1.
10.    The downstream product of claim 9 selected from the group consisting of a pharmaceutical ingredient, a pharmaceutical excipient, a purified water, and a high purity water.